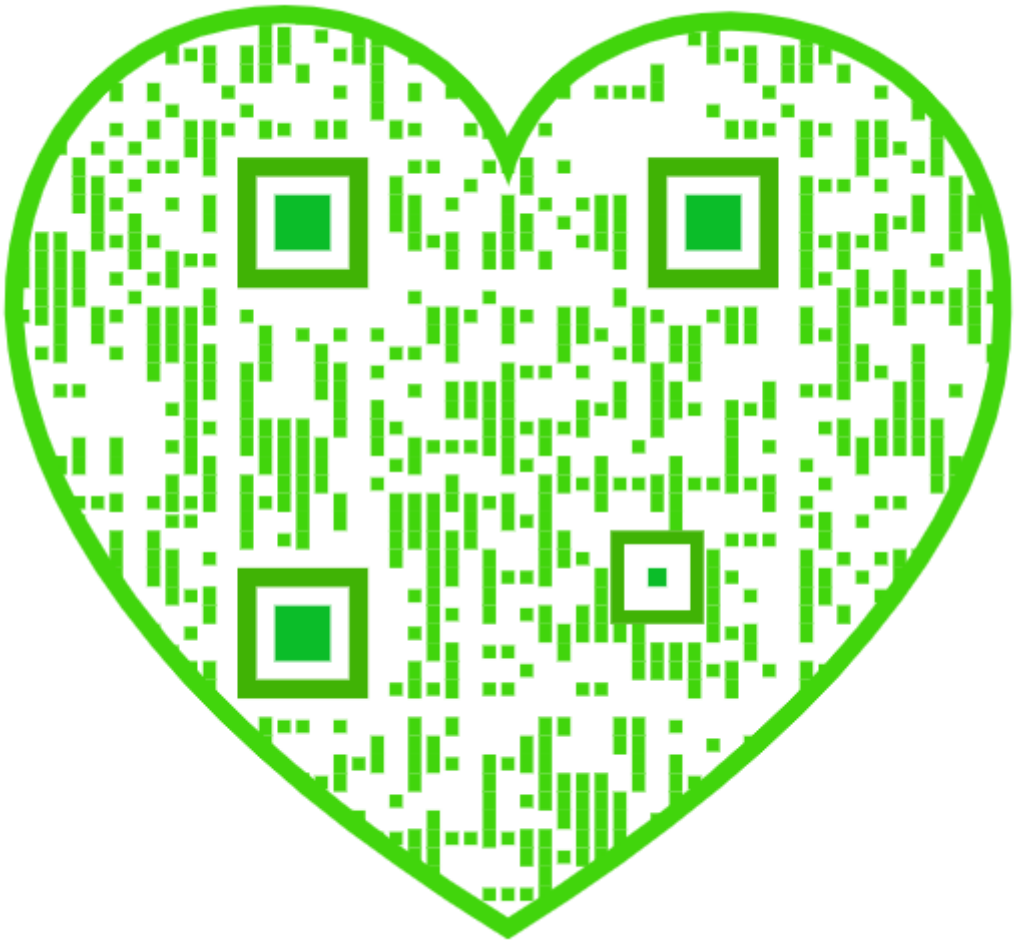
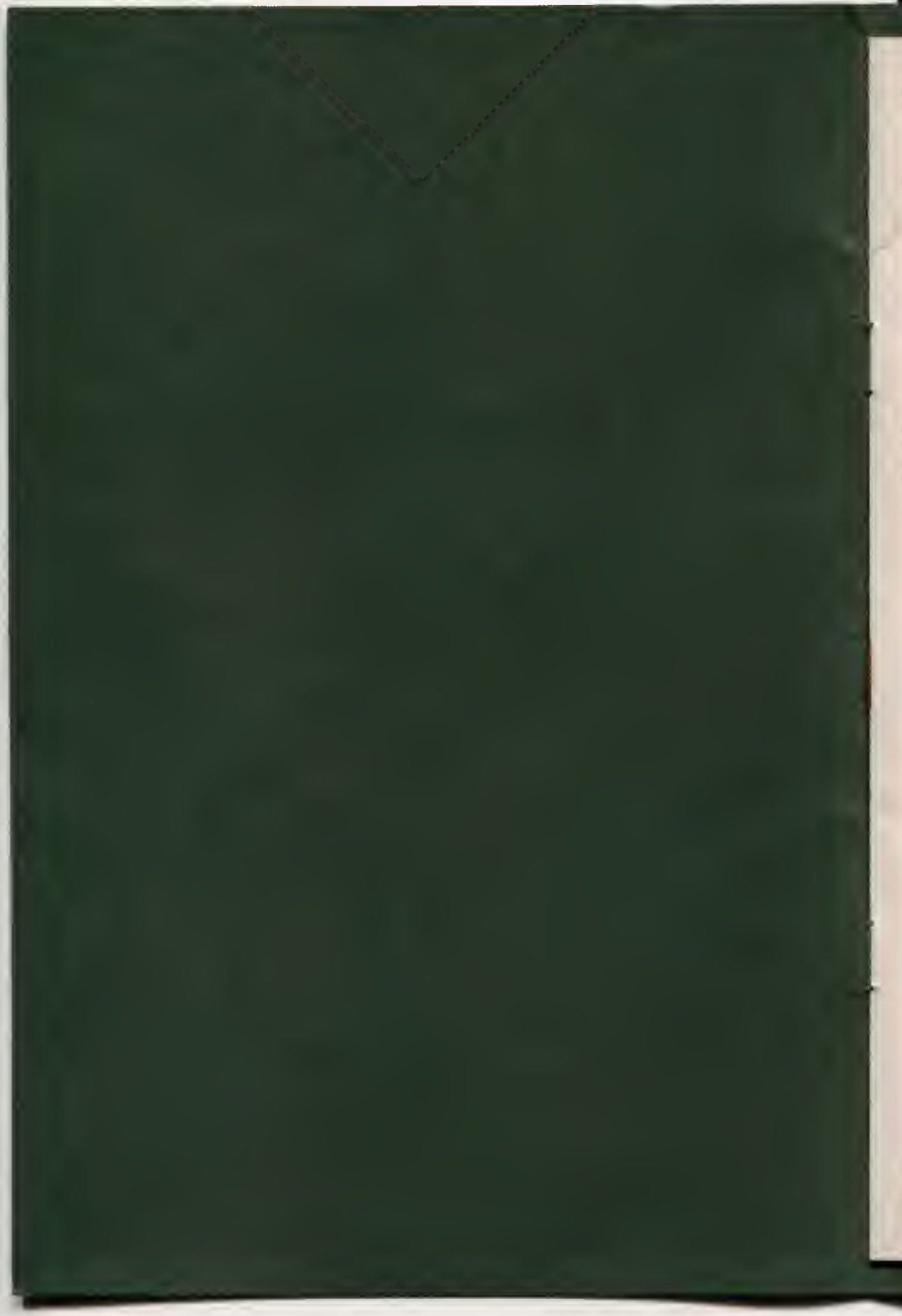
The Miller High Speed Printing Press

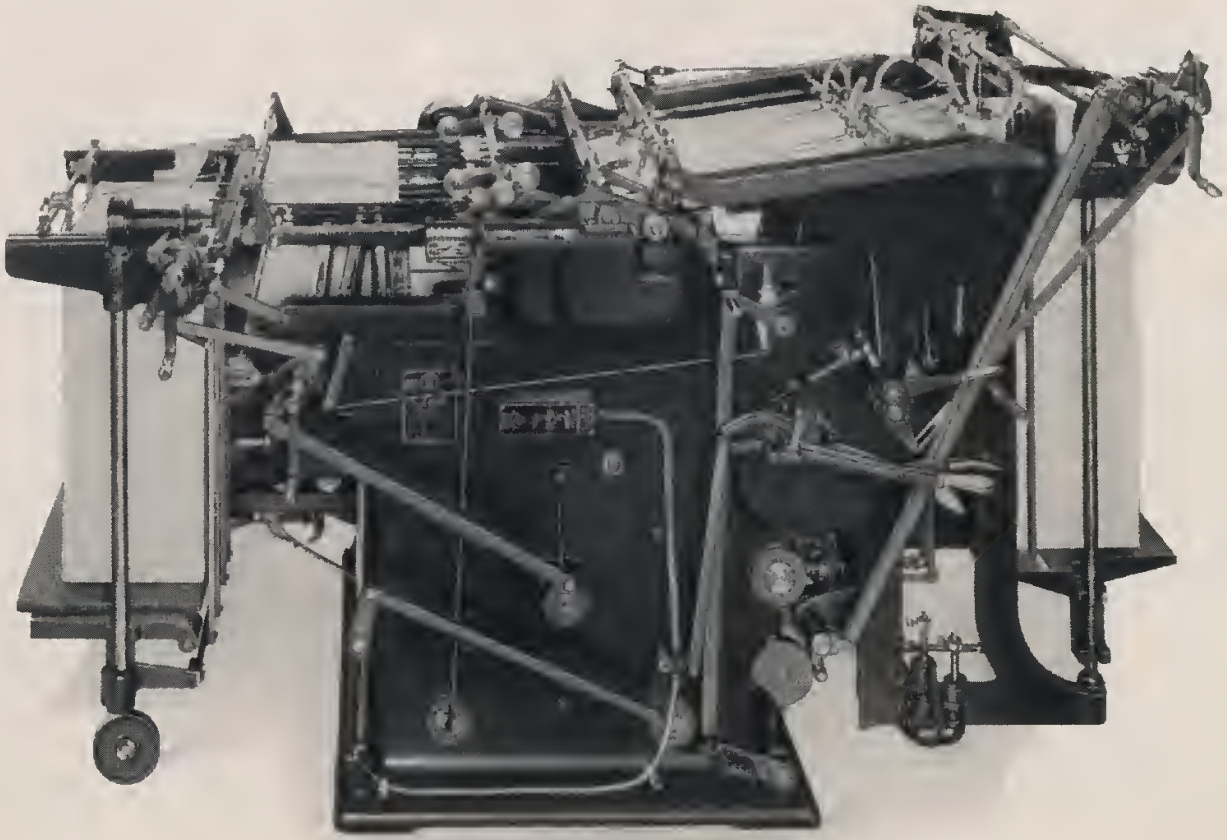




Miller

High-Speed Printing Press

MILLER PRINTING MACHINERY CO.
Pittsburgh, Pennsylvania, U. S. A.



Feeder Side View of Press

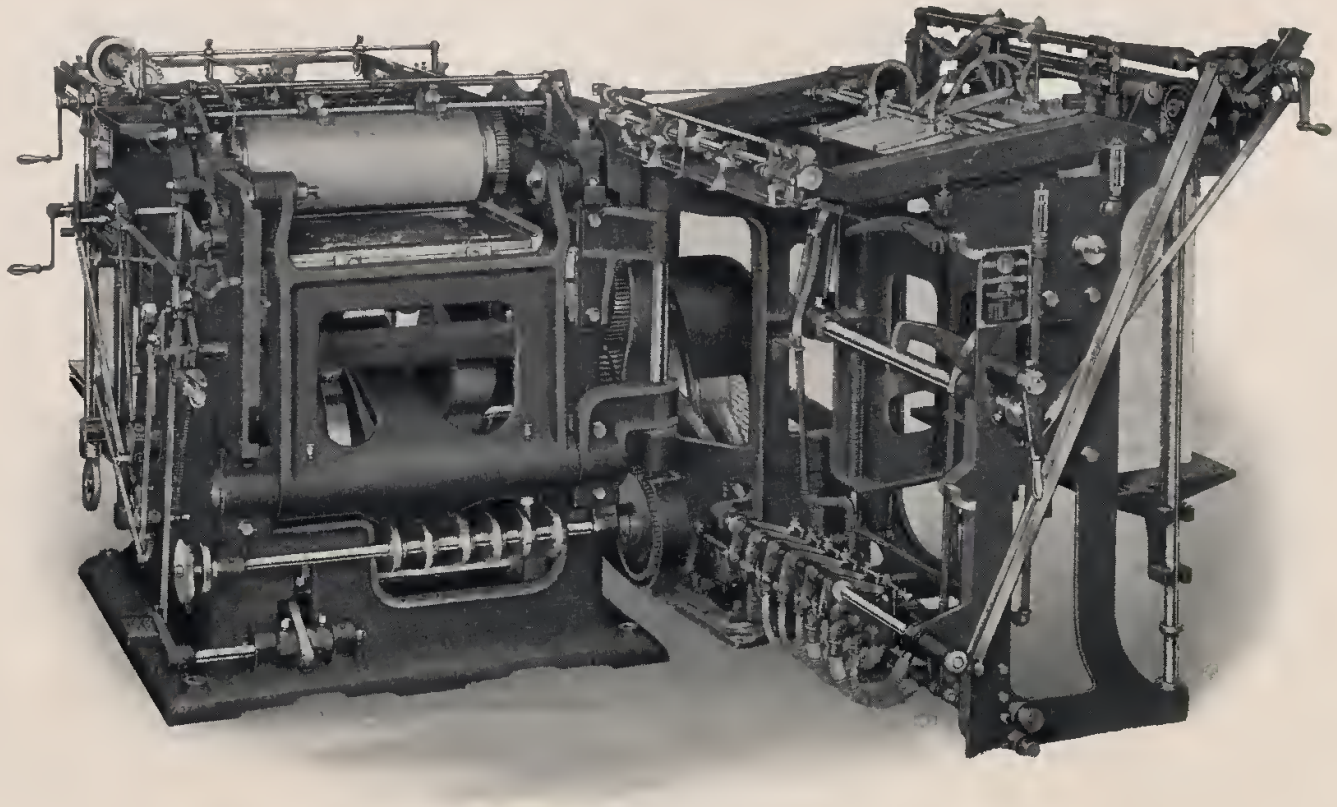
MILLER HIGH-SPEED

AUTOMATIC CYLINDER

THE MILLER HIGH-SPEED PRESS attains its *guaranteed speeds of 3,000 to 5,000 impressions per hour* with a quiet, easy movement, free from semblance of jar or vibration, and without sacrifice of register or other important qualities essential to the production of the highest quality of work.

IMPRESSIONAL STRENGTH. A glance at the illustrations reveals massive strength and rigidity in every line of construction. Note the heavy one-piece box frame, symmetrical in appearance, absolutely rigid and unyielding, even when set upon an improperly supported floor. The tracks are wide and well-supported. The steel bed-rollers traversing the tracks are closely spaced and accurately gauged to size, giving a smooth, easy movement to the bed, and insuring an absolutely even impression. The bed is heavy and well-ribbed, supplied with hold-downs engaging the tracks, which are adjustable to take up side-play, insuring side-register. Bed operates on horizontal plane giving unobstructed access at either end for unlocking, planing down form and relocking. Convenient for form changes on bed of press. The cylinder, eight and one-half inches in diameter, is heavy and well-braced, with cylinder bearings large in diameter and of liberal length. Not one ounce of weight, where weight is essential, has been sacrificed for speed. No press ever built possesses a stronger, more rigid impression than the MILLER HIGH-SPEED — prints the heaviest forms with ease and responds to the most delicate overlays and underlays.

REGISTER. Perfect register between cylinder and bed is assured by direct gearing of cylinder with bed throughout the printing stroke. The reciprocal movement of bed and cylinder, each traveling but half the distance, serves to slow down the peripheral speed of the cylinder. As a consequence loss of register between feed guides and grippers is never experienced on the MILLER HIGH-SPEED. Adjustable feed guides and grippers (standard practice) permit gripper margins as narrow as three points. In the hands of a competent pressman four-color-process work registers perfectly within the guaranteed speed range.

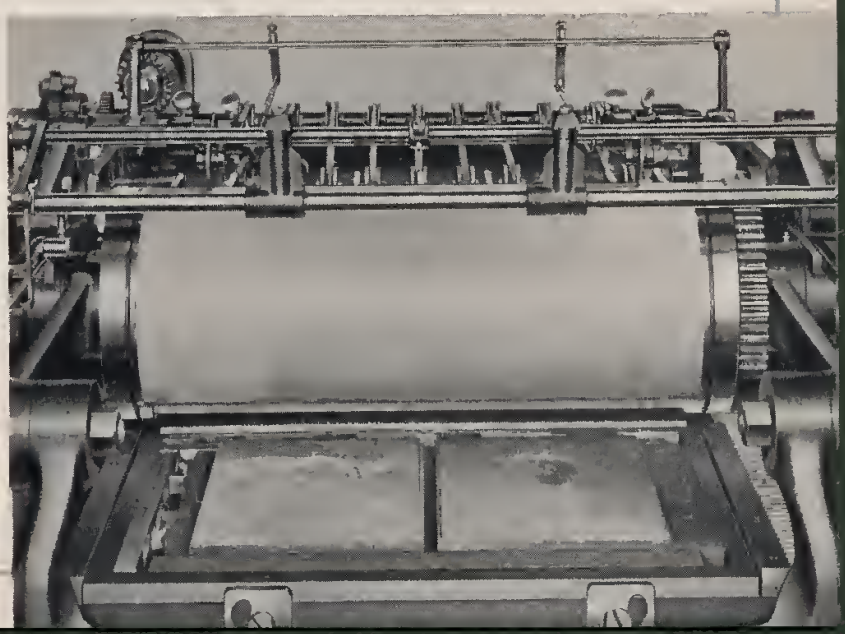


Feeder Swung Back

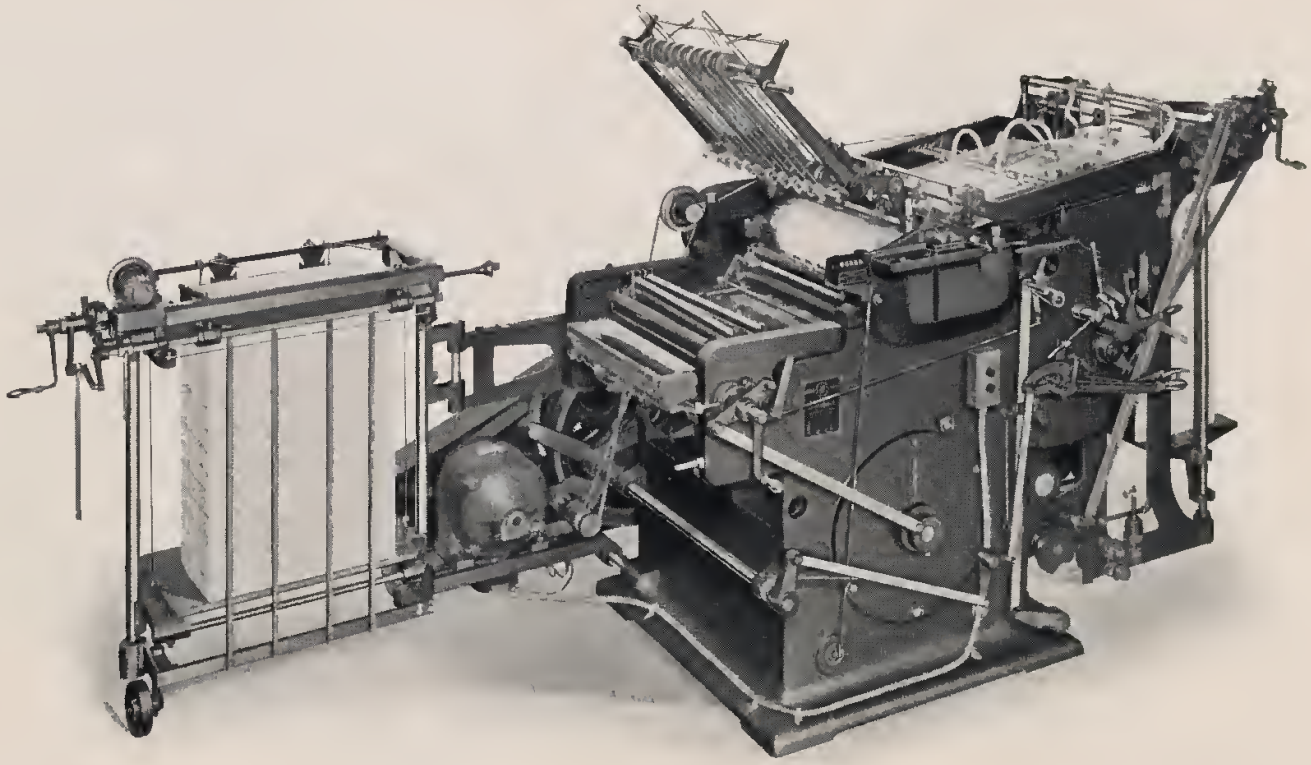
Distribution. The ink distribution of the Miller High-Speed is adequate to the requirements of the heaviest forms. Roller adjustments are simple and reliable. Form rollers clear maximum size form in both directions. Automatic cut-off when impression is tripped insures uniform color throughout the run. Convenient fountain adjustments give positive and absolute color control. The fountain is easy to get at and easy to take apart, a convenience in cleaning.

Automatic Pile Feeder. The Miller High-Speed is equipped with the well-known *Miller Suction Swing-away Pile Feeder*, especially designed to meet High-Speed requirements. Positive air control of the sheet from pile to guides, automatic right or left side register and automatic trip and brake connections, insure uniformity of product and unvarying register. The press *trips automatically and stops instantly* if sheet fails to contact with front guides or if more than one sheet is carried to the guides. Operates unfailingly at regular rated speeds on all weights and grades of stock, ranging from onion skin to heavy coated papers and cardboards. The stock table holds twenty-six inches of stock, the height of the pile automatically maintained in correct position as sheets are fed to the press. The feeder swings back entirely free of the press, giving ready access to cylinder and bed, a feature which also permits the loading of stock while pressman is applying make-ready.

Pile Delivery. The printed sheets are delivered and neatly jogged, printed side up, on an extension delivery table which automatically lowers as the sheets pile up. This accommodates a pile thirty inches high. No adjusting required other than setting stock guides to dimensions of sheets being



Showing Accessibility of Bed



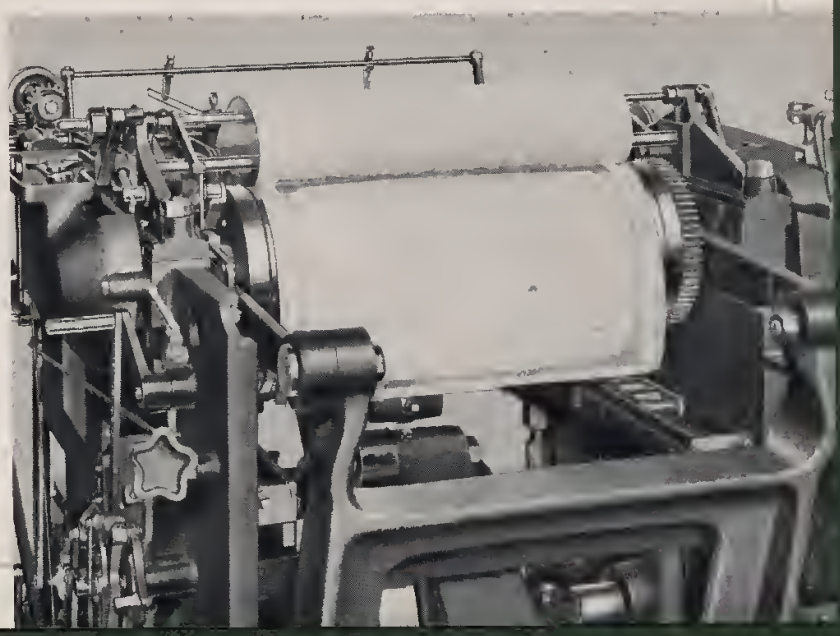
Delivery Swung Back, Delivery Carriage Raised

delivered. Delivery is continuously driven at one speed independent of press—an important aid to perfect delivery of extremely thin or heavy stocks. The delivery and connecting mechanism swings out entirely free of the press, giving unobstructed access to the form, ink table, rollers and the fountain—connected or disconnected in an instant.

VARIABLE SPEED DRIVE. The MILLER HIGH-SPEED is regularly equipped with the *Variable Speed Motor Drive*, which by the simple movement of the electrical controller handle, instantly regulates the speed of the machine to any desired point ranging up to 5,000 impressions per hour. May be set at any desired speed, and this speed uniformly maintained throughout the run regardless of press stops — a feature essential to close register in the production of particular multi-color work.

GAS SHEET DRIER. The MILLER HIGH-SPEED is regularly equipped with latest approved type of gas sheet drier. Simple adjustment regulates degree of heat to suit form in hand. Meets most exacting requirements of fire underwriters. Also, non-offset spray devices may be conveniently utilized over delivery pile without undue spreading of solution to press parts.

CONVENIENCE. The MILLER HIGH-SPEED is provided with every convenience placed at the hand of the operator. All adjustments are simple and readily understood. The cylinder is supplied with convenient tympan clamp, reel rods, etc., all easily accessible. Feeder equipped with universal type adjustable separator feet—no change of feet required to meet varying stock conditions. Unobstructed access to form, cylinder and rollers contributes to speedy make-ready, speedy



Showing Accessibility of Cylinder

handling, speedy wash-up. All adjustments involved in make-ready may be classed as "standard practice," familiar to every pressman, and calling for no special training — easily mastered during the demonstration period.

STANDARD EQUIPMENT. The Standard Equipment furnished with MILLER HIGH-SPEED UNIT consists of Press, Feeder, Extension Pile Delivery, Miller Gas Sheet Drier, Two All-Steel Chases, Set of Wrenches, Counter, Oil Can, Four Form Rollers (two cast), One Vibrator Roller, Two Vibrator Rider Rollers (one cast), Two Ductor Rollers (one cast), Four Distributor Rollers (two cast), Two Distributor Rider Rollers, Pump Motor and Variable Speed Press Motor and Controller ready for wiring to power line.

SPECIFICATIONS

Inside Chase Measurements	12 11-16 x 19 3-16 Inches
Type-matter Locked in Chase	12 x 19 Inches
Largest Sheet	13 x 20 Inches
Smallest Sheet	4 x 7 Inches
Size of Bed	14 1-2 x 20 3-4 Inches

DISTRIBUTION. 2 Form Rollers with Geared Vibrator, 2 Composition Distributors with Steel Vibrators, Ductor Roller, Full-width Ink Plate and Fountain

Pile Feeder Capacity	26 Inches
Pile Delivery Capacity	30 Inches
Floor Space	60 x 90 Inches
Working Space	78 x 144 Inches
Height	53 Inches
Speed Range per Hour	2,000 to 5,000
Size Press Motor	1½ H. P.
Size Pump Motor	½ H. P.
Net Weight with Motor	4,330 Pounds
Shipping Weight	5,280 Pounds

Printed in U. S. A.